

Application No. 09/582,175

New claims 6-14 merely claim the invention in accordance with U.S. Practice. Reconsideration of the application is respectfully requested.

35 U.S.C. §112 Rejections

The Examiner rejected claims 1-5 under 35 U.S.C. §112, second paragraph as being indefinite. In response, Applicant has cancelled these claims.

35 U.S.C. §102 Rejections

Claims 6-11 are directed to the U tube embodiment of the present invention, originally claimed in canceled claim 1. The Examiner rejected this embodiment, as originally claimed, as being anticipated by U.S. Patent No. 5,972,211 to Jones. In order to perfect his claim to priority over the Jones reference, Applicant has enclosed a certified English translation of the foreign priority papers as required by 37 CFR 1.55. Consequently, the rejection over Jones is now moot.

The Examiner also rejected the U tube embodiment, as originally claimed, as being anticipated by U.S. Patent No. 1,688,915 to Astrom. Anticipation requires that each and every claim element be disclosed in a single prior art reference or embodied in a single prior art device. Applicant's new independent claim 6 recites "each compartment further including an outlet port for backwashing, each outlet port being disposed adjacent to and below each upper bed" (claim 6, ll. 14-16). Claims 6-7 include this feature and claims 8-11 use this feature. The device of Astrom does not disclose an outlet port located below a nozzle bed. Therefore, Astrom cannot anticipate these claims. Nor does Astrom render claims 6-11 obvious.

Claims 12-14 are directed towards the vertical liquid separation column embodiment of the present invention, originally claimed in canceled claim 4. The Examiner rejected this embodiment, as originally claimed, as being anticipated by U.S. Patent No. 4,461,706 to Siegers. Applicant would like to respectfully point out that what the Examiner has identified as being upper and lower beds 2 and 3 of the Siegers device, are identified by the reference as being filtration chambers for holding

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a filtration medium. As such, these elements do not correspond to Applicant's nozzle beds, but rather correspond to the filtration chamber of Applicant's fluid separation column.

Applicant's claim 12 recites "at least one vertical liquid separation column, wherein each column comprises a single chamber" (ll. 3-4). Claim 12 includes this feature and claims 13-14 use this feature. Siegers by contrast discloses a filter space divided into at least two and preferably three chambers (col. 1, l. 68; col. 2, ll. 15-19; col. 9, ll. 7-9). Thus, Siegers does not disclose Applicant's vertical column having a single chamber and therefore cannot anticipate claims 12-14. Nor does Siegers render claims 12-14 obvious. Applicant respectfully requests that this rejection be withdrawn.

35 U.S.C. §103 Rejections

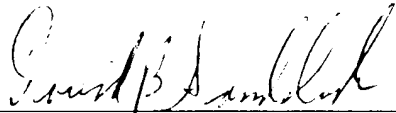
The Examiner rejected original claims 2-3 as being obvious over Jones or Astron in view of ordinary skill in the art. The Examiner also rejected original claim 5 as being obvious over Siegers in view of ordinary skill in the art. These claims have been canceled.

In view of the foregoing, Applicant respectfully submits that new claims 6-14 are in condition for allowance and that the application should be passed to issue. The Examiner is encouraged to contact the undersigned attorney at (626) 795-9900 to facilitate prosecution of the application.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Respectfully submitted,

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626/795-9900

DBS/slt

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Paragraph beginning at line 10 of page 7 has been amended as follows:

With reference to FIG. 12, ~~Consider~~ consider the U tube model of the present invention as shown in FIG. 12.

Paragraph beginning at line 5 of page 8 has been amended as follows:

With reference to FIG. 13, now ~~Now~~ consider a conventional system with a resin column in a straight tube as shown below. The resin column is displaced a distance **h** to make it compact. Suppose the length of the resin column is **L** and its mass is **m m**.

After the paragraph beginning at line 35 of page 10, please add the following new paragraphs:

FIG. 12 is a schematic representation of a U tube model of the present invention.

FIG. 13 is a schematic representation of a resin column.